PLANNING COMMISSION ACTION

2011-01 *Bagby Street*

APPLICANT: Walter P. Moore and Associates; Midtown Redevelopment Authority

KEY MAP: 493 P, T **LAMBERT:** 5356, 5357
JURISDICTION: Houston, Harris County **DISTRICT/PRECINCT:** Dist. D/ Pcnt. 1

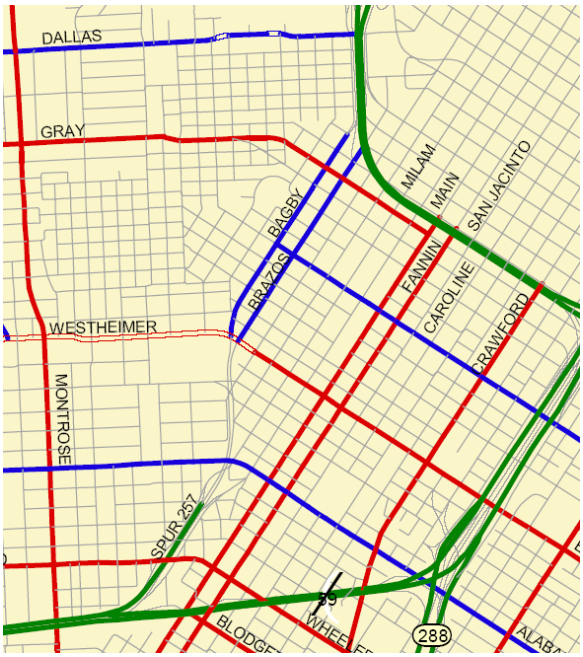
PROPOSAL:
Reclassify major collector Bagby Street from C-4-80 (Major Collector – 4 Lanes – 80' ROW) to C-3-80 between Gulf Freeway and Spur 527.

APPLICANTS JUSTIFICATION & HISTORY:
The Midtown Redevelopment Authority (MRA) is planning to reconstruct Bagby Street between Heiner and Tuam as a part of its Transportation Improvement Plan. Bagby between Gulf Freeway and Spur 527 is currently classified as a sufficient width C-4-80 on the 2010 Major Thoroughfare and Freeway Plan (MTFP) Hierarchy Table. The street currently functions as a two-lane one-way roadway with parking on either side for a majority of this segment.

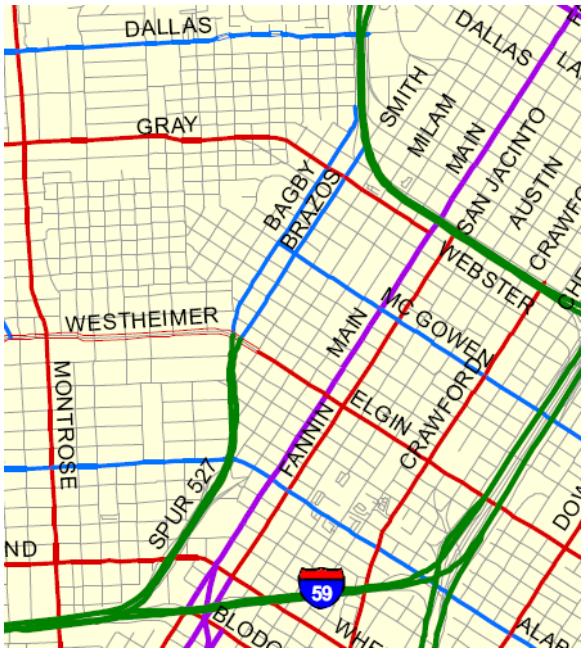
Bagby Street was first included as a Major Street on Houston's 1942 Major Street Plan. In 1972 Brazos was added to the MTFP as a major thoroughfare. In 1995 the Hierarchy Table classified Bagby as a P-4-80. In 2001 Bagby and Brazos were reclassified as major collectors (C-4-80). The reasons for the reclassification were: a) A principal thoroughfare is defined as: a segment that traverses more than five miles, has volumes over 30,000 vehicles per day (vpd), and generally serves heavy commercial or industrial traffic; and b) Bagby traverses for 0.75 miles from Jefferson to Spur 527 and carries a current traffic volume of 7,565 vpd., thus meeting the definition of a major collector.

1942 Major Street Plan

1972 MTFP



2003 MTFP



2010 MTFP

The proposed design for Bagby is a two-lane roadway with bump-outs for parking on either side. The on street parking locations and pedestrian safety measures at intersections is believed to benefit existing retail uses along the street. Dedicated turn lanes have been designed at intersections where there are high volume turning movements. The street is also being designed in accordance with Greenroads™ standards to ensure its sustainability. Additionally the street is being designed such that if future volumes warrant a third lane the parallel parking along the east side could be removed to create a third travel lane. Public Works and Engineering Department has reviewed the traffic study as a part of MRA's Bagby Reconstruction Project.

STAFF RECOMMENDATION:
Reclassify major collector Bagby Street from C-4-80 to C-3-80 between Heiner and Elgin Street.

The Street Hierarchy Classification system has a code that is used to identify certain characteristics. The breakdown of that code is:

P-6-100
P *Street function, either (**P**)rincipal Thoroughfare, (**T**)horoughfare, or (**C**)ollector.*
6 *Number of lanes to meet projected future traffic volumes*
100 *Required right-of-way width (feet)*

STAFF JUSTIFICATION:
The existing land uses along Bagby Street are primarily medium to high density residential with some commercial uses. The street forms a one-way pair/couplet with Brazos between IH 45 and Spur 527. Also the street currently functions as a two-lane roadway with parking on either side for a majority of this segment. The Traffic Study conducted by the applicant indicates that the

proposed configuration of the roadway with dedicated turn lanes at Pierce, Gray and Webster will address current and projected 2035 traffic needs along this corridor. Thus reclassification of Bagby as a proposed 3-lane major collector street preserves future mobility needs while allowing for the corridor to be developed in context of the development/redevelopment pattern within this area. Approval of this recommendation does not include approval of the proposed design plans for the geometry of the street, intersections and on-street parking. Those design details will still require review by PWE Traffic Division.

PLANNING COMMISSION ACTION:
Reclassify major collector Bagby Street from C-4-80 to C-3-80 between Heiner and Elgin Street.

1. Population & Employment Projections

According to 2010 Census, Texas grew by 20% in ten years, to over 25 million people, recording about a quarter of the nation's overall growth. The rate of growth in Texas was twice the national average. Harris County is the most populous county (4 million) in Texas. Today, 2.1 million people live within the City of Houston and another 2 million live in the City's extraterritorial jurisdiction (ETJ). Since 2000, the City of Houston added 146,000 people (8 percent) to its population. Houston's ETJ however grew 35 percent during the same time period.

Houston and its ETJ's rich employment sector are home to more than 1.8 million jobs, making it the state's most populous and robust economic center. More than one million jobs are located within the City limits and are saturated within the City's eight major activity centers.

One of the greatest challenges to Houston's mobility is that by 2035 significant numbers of residents are projected to live outside the City limits in the ETJ; while the major thrust of employment growth will be within the City limits. This increase in distance between the population and employment centers will result in more travel, greater travel time, and longer travel delays.

While the ETJ is growing, the City will also be taking in an additional 550,000 new residents. The most notable population growth occurs inside Loop 610. It reflects efforts to create a dense urban core through mixed-use development strategies.

To compare the result between 2000 and 2010 Census, the subject area's population grew by 38.0 % from 5,177 to 7,144 and was more than the City of Houston's growth.

The Houston-Galveston Area Council (H-GAC) projects that over the next 20 years (2015 – 2035), the population within the study area* will increase from 9,933 to 10,024 (91 persons), or 0.9%. The number of persons per acre is projected to increase from approximately 19.67 to approximately 19.85. During the same period, H-GAC estimates that the total jobs in the subject area will increase from 7,979 to 7,984 (5 jobs), or 23.5%. The number of jobs per acre is projected to increase from approximately 15.80 to 15.81.

Expressed in percentages, the subject area's population growth is expected to be less than the City of Houston's (0.9% vs. 14.4%), and the area's job growth is less than the City's (0.1% vs. 23.8%).

Year	Population (Persons/ Acre)	% Chg	Households (Households/ Acre)	% Chg	Jobs (Jobs/ Acre)	% Chg
2015	19.67		8.83		15.80	
2020	19.75	0.4%	8.83	-0.1%	15.79	0.0%
2025	19.53	-1.1%	8.81	-0.2%	15.67	-0.8%
2030	19.76	1.2%	8.82	0.1%	15.81	0.9%
2035	19.85	0.5%	8.81	-0.1%	15.81	0.0%
Change (2015 to 2035)	0.18	0.9%	-0.03	-0.3%	0.01	0.1%
City of Houston Change (2015 to 2035)		14.4%		16.4%		23.8%
City of Houston ETJ Change (2015 to 2035)		53.3%		62.4%		50.9%

Source: H-GAC's 2035 Regional Growth Forecast
** Data represents population, jobs, and households in 16 Traffic Analysis Zones (TAZ) encompassing approximately 505 acres around the proposed amendment. Population projections do not include projections for group housing.*

2. Land Use & Platting Activity

The study area analyzed extends between Taft Street to the east, Dallas and IH 45 to the north, Main Street to the east, and Elgin/Westheimer to the south. The primary land uses adjacent to Bagby are medium to high density residential and commercial uses. The composition of land use east and west of Bagby is significantly different. East of Bagby Street the dominant land use is commercial with office and multifamily residential. West of Bagby the land use is primarily single family residential with some large multifamily residential developments along Bagby and smaller projects sprinkled throughout the study area. 15% of the overall study area is vacant/undeveloped. Gregory Lincoln K-8 Junior High School and the under construction Carnegie Vanguard High School represent the largest institutional tract in the north-west corner of the study area. Other public uses parcels are located within the Fourth Ward neighborhood.

Subdivision Plat Name	Action Date	Key Map	Land Use	Property Size (acres)	Number of Lots
Brazos Place Subdivision	1-Apr-04	493P	Unrestricted	0.14	
Five Hundred Fourteen Interest Reserve	24-Jun-04	493T	Unrestricted	0.43	
Settegast and Upham Block 16 and Fairgrounds Block 3 replat no 1	22-Dec-05	493P	Unrestricted	1.44	
Settegast and Upham Block 17 partial replat no 1	22-Dec-05	493P	Unrestricted	0.49	
Baldwin Gardens Subdivision	16-Feb-06	493p	SF Residential (public street)	0.11	3
Hibernia Midtown Subdivision	6-Mar-06	493P	Commercial	1.08	
Bend on Brazos Street Subdivision	30-Mar-06	493T	SF Residential (public street)	0.46	9

Smith at Drew Subdivision	14-Sep-06	493T	Commercial	0.80	
Fairgrounds Addition Block 14 partial replat no 2	9-Nov-06	493P	Unrestricted	0.52	
Helena Gardens Subdivision	8-Nov-07	493T	Unrestricted	0.41	
Old Scouts Plaza Subdivision	6-Aug-09	493P	Commercial	0.65	
Greater Houston USBC Association Subdivision	29-Oct-09	493P	Office	0.19	
Harrys Restaurant Subdivision	10-Jun-10	493T	Commercial	0.55	

3. Right-Of-Way Status

The existing Bagby Street ROW width between IH 45 and Spur 527 is 80 feet. Most major thoroughfares in the immediate area have sufficient right-of-way. However, there are portions of Westheimer between Bagby and Montrose that are designated "*to be widened*."

Street	Segment	Classification	Status
Bagby	IH 45 To Spur 527	C-4-80	Sufficient width
Brazos	Jefferson to Spur 527	C-4-80	Sufficient width
Gray	Main to Montrose	T-3-70	Sufficient width
McGowen	Bagby to Crawford	C-3-80	Sufficient width
Fannin	IH 45 to Alabama	T-4-80	Sufficient width
Elgin	Crawford to Fannin	T-4-70	Sufficient width
Elgin	Fannin to Smith	T-4-80	Sufficient width
Elgin	Smith to Brazos	T-4-80	Sufficient width*
Elgin	Brazos to Bagby	T-4-80	Sufficient width*
Westheimer	Bagby to Montrose	T-4-70	To be widened
Montrose	Gray to Westheimer	T-4-100	Sufficient width
Montrose	Westheimer to Alabama	T-4-100	Sufficient width
Main	IH 45 to Alabama	Transit Corridor Street	

** 2010 MTFP indicates these segments as "To be widened" however the ROW width is sufficient. The map will be updated with the 2011 MTFP.*

4. Major Thoroughfare Spacing

There is a good grid network of thoroughfares, collectors and local streets in the study area. All the thoroughfares and collectors streets from north-south and east-west are all spaced less than one mile from each other.

Street	From	To	Street Type	Direction	Spacing (mile)
Bagby	IH 45	Gray	Major Collector	north-south	0.18
Bagby	Gray	McGowen	Major Collector	north-south	0.27
Bagby	McGowen	Spur 527	Major Collector	north-south	0.32

Brazos	IH 45	Gray	Major Collector	north-south	0.11
Brazos	Gray	McGowen	Major Collector	north-south	0.27
Brazos	McGowan	Spur 527	Major Collector	north-south	0.31
Montrose	Gray	Westheimer	Major Thoroughfare	north-south	0.60
Gray	Montrose	Bagby	Major Thoroughfare	west-east	0.96
Gray	Bagby	Brazos	Major Thoroughfare	west-east	0.06
Gray	Brazos	Main	Major Thoroughfare	west-east	0.31
McGowen	Bagby	Brazos	Major Collector	west-east	0.06
McGowen	Brazos	Main	Major Collector	west-east	0.31
Elgin	Bagby	Brazos	Major Thoroughfare	west-east	0.03
Elgin	Brazos	Main	Major Thoroughfare	west-east	0.31
Westheimer	Bagby	Montrose	Major Thoroughfare	west-east	0.57

5. Mobility

In January 2011, Water P. Moore and Midtown Redevelopment Authority released a Traffic Impact Analysis (TIA) study of Bagby Street Improvements Traffic Assessment. A look at Average Daily Traffic (ADT) along Bagby Street shows compounded annual 2% increase until the projected year 2035. Based on results of the capacity analyses, proposed improvements (a two-lane roadway with bump-outs for parking on either side and dedicated turn lanes) on Bagby Street will only decrease level of service from 'B' to 'C' at intersections of Bagby Street at Webster Street in 2035.

The City of Houston's, Public Works and Engineering Department Design Manual describes a couplet street type as having 60-100 feet of right of way, two to five travel lanes, and 1,000 to 25,000 average daily traffic volumes (or 5,000 vehicles per lane per day). This description applies to Bagby Street and was considered when developing the proposed cross-sections. The table below shows the ADT projections on Bagby based on H-GAC's projections though 2035.

Bagby Street Average Daily Traffic Projections

Year	St. Joseph to Pierce	Pierce to Gray	Gray to Webster	Webster to McGowen	McGowen to Tuam
2009	5,917	7,181	7,147	7,780	8,197
2010*	16,000	7,300	7,300	7,900	8,400
2015*	16,400	8,200	8,200	8,700	9,200
2020*	16,900	9,100	9,200	9,500	10,200
2025*	17,400	10,200	10,300	10,300	11,200
2030*	17,800	11,300	11,600	11,600	12,300
2035*	18,332	12,620	13,016	12,403	13,595
Compound Annual Growth Rate**	0.5%	2.2%	2.3%	1.8%	2.0%

* Estimated based on compounded growth between 2009 and 2035 H-GAC volumes
** The Compound Annual Growth Rate (CAGR) was used over an annual growth rate to best reflect the anticipated growth patterns in the Midtown

Existing Conditions (2010)
Existing conditions capacity analysis was conducted using the traffic volume data collected, existing lane configurations, and existing traffic signal timings.

Proposed Conditions (2010)
Proposed conditions capacity analysis was conducted using the traffic volume data collected, proposed lane configurations (a two-lane roadway with bump-outs for parking on both sides and dedicated turn lanes) and existing traffic signal timings.

Background Conditions (2035)
Background conditions capacity analysis was conducted using the traffic volume data collected grown using a 2% compound annual growth rate up to the year 2035, existing lane configurations, and existing traffic signal timings.

Proposed Conditions (2035)
Proposed conditions capacity analysis was conducted using the traffic volume data collected grown at 2% CAGR up to the year 2035, proposed lane configurations (a two-lane roadway with bump-outs for parking on either side and dedicated turn lanes), and existing traffic signal timings.

The tables below show a comparison of the level of service for existing and proposed conditions in the study area.

AM Peak Hour Intersection Level of Service (LOS) Comparison

	Existing (2010)	Proposed (2010)	Background (2035)	Proposed (2035)	Improved Timings (2035)
Bagby					
at Pierce	A	A	F	F	F
at Gray	C	C	C	C	C
at Webster	C	B	C	C	B
at Hadley	A	A	A	A	A
at McIlhenny	A	A	A	A	A
at Bremond	A	A	A	A	A
at McGowen	A	A	A	A	A
at Dennis	A	A	A	A	A
at Drew	A	A	A	A	A
at Tuam	B	B	B	C	B
Brazos					
at Pierce	C	C	F	F	D
at Gray	B	B	F	F	B
at Webster	C	C	F	E	C
Smith					
at Gray	B	B	B	B	B
at Webster	B	B	B	B	B
Baldwin					
at Pierce	A	A	A	A	A

PM Peak Hour Intersection Level of Service Comparison

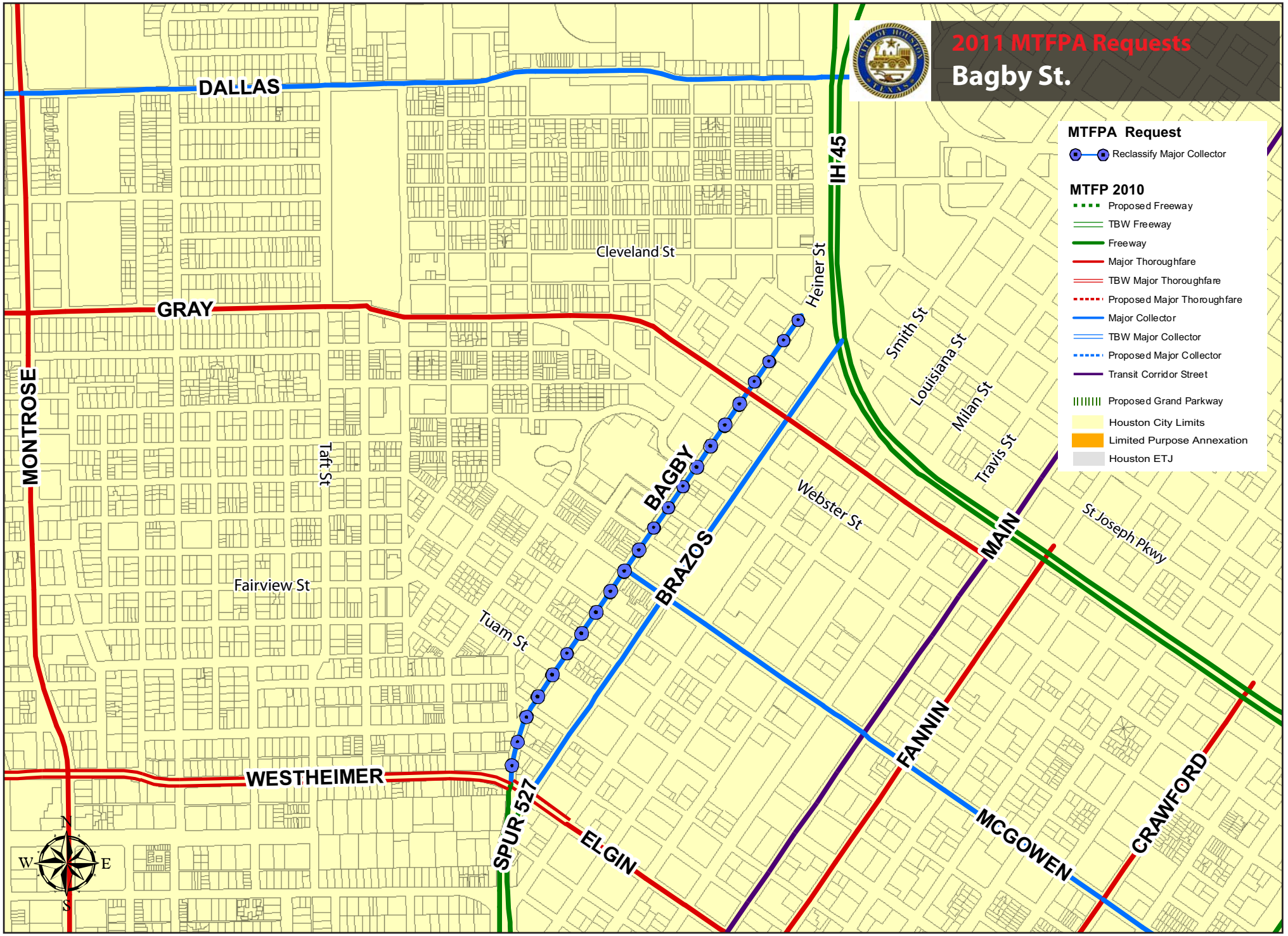
	Existing (2010)	Proposed (2010)	Background (2035)	Proposed (2035)	Improved Timings (2035)
Bagby					
at Pierce	A	A	E	E	F
at Gray	B	B	F	F	F
at Webster	B	B	F	F	E
at Hadley	A	A	A	A	A
at McIlhenny	A	A	A	A	A
at Bremond	A	A	A	A	A
at McGowen	A	A	B	B	B
at Dennis	A	A	A	A	A
at Drew	A	A	A	A	A
at Tuam	B	B	C	C	B
Brazos					
at Pierce	C	C	F	F	C
at Gray	C	C	E	E	C
at Webster	C	C	F	F	D
Smith					
at Gray	D	D	F	F	F
at Webster	B	B	F	F	E
Baldwin					
at Pierce	A	A	A	A	A

The AM and PM peak hour LOS for 2035 at the intersection Bagby and Pierce will be F because the intersection is not signalized and has significant eastbound movement on to Pierce Street. The PM peak hour LOS at the intersection West Gray and Bagby will be F because of the volume of westbound traffic on West Gray. The intersection of Bagby and Webster during the PM peak reflects a LOS E (Improved Timing 2035) due to the volume of through movements on both streets and the right turn movement on Webster. The intersection of Smith Street with West Gray and Webster indicate a 2035 PM peak LOS of F and E respectively due to the through and turn movements on Smith Street. The through movement along West Gray also has a LOS of F at this intersection.

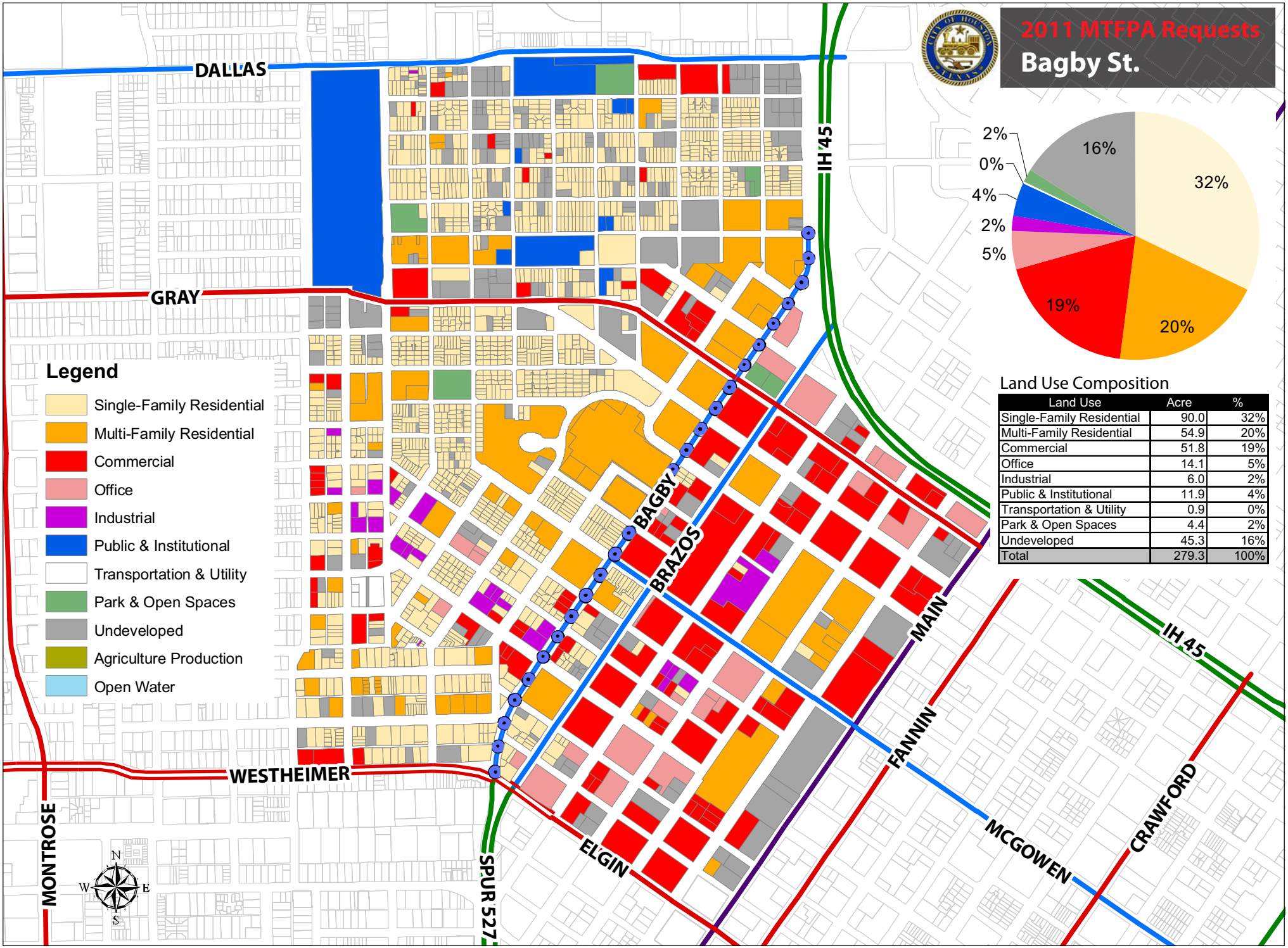
The planned design for Bagby as a one-way two-lane roadway with turn lanes at intersections with higher turning movement maintains the vehicular mobility along the corridor. Additionally the on-street parking and pedestrian improvements complements medium-high density residential and commercial developments in the area. Additionally, the street is being designed such that if future volumes warrant a third lane the parallel parking along the east side could be removed to create a third travel lane.

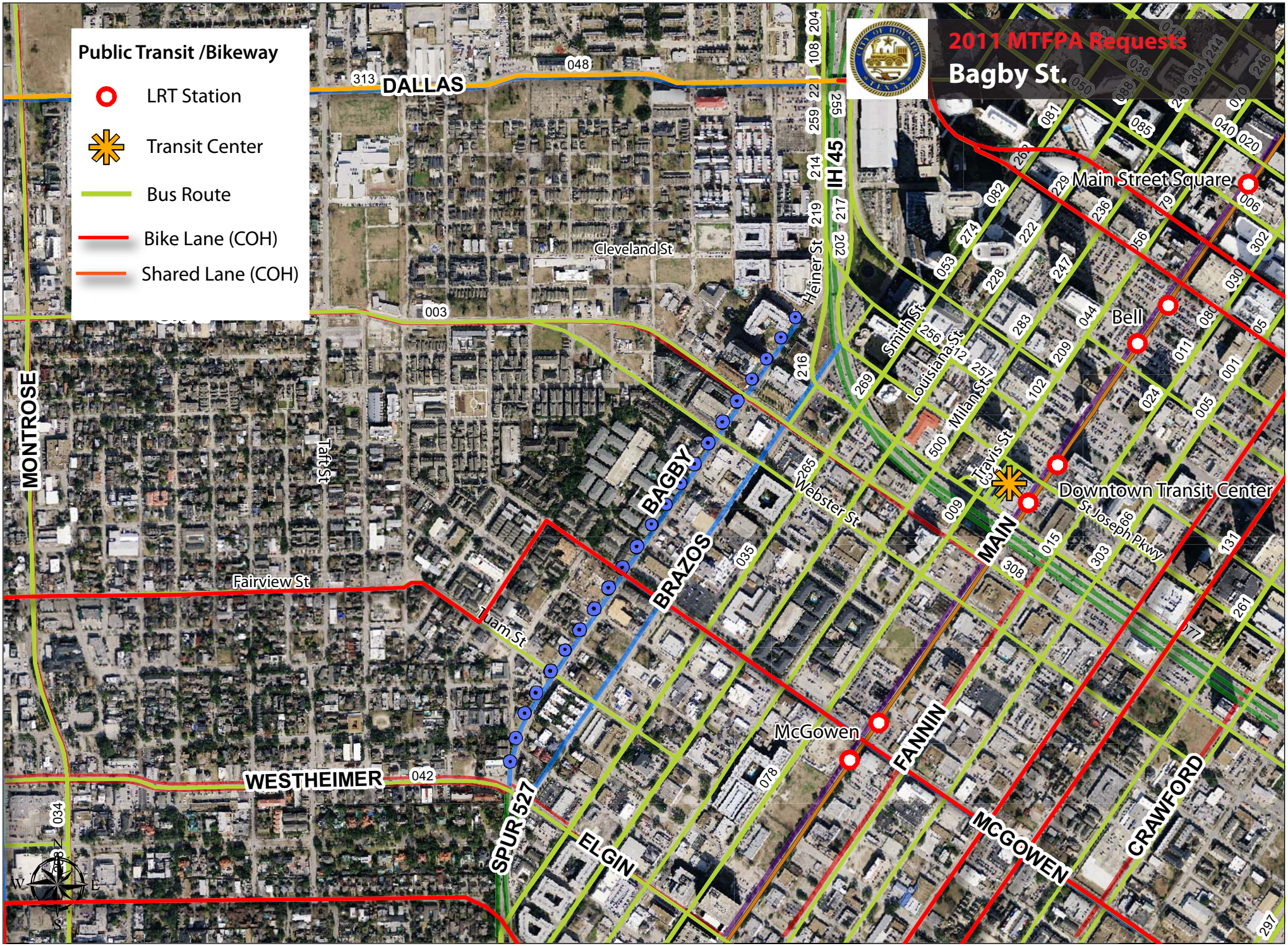
The study area has a dense network of streets in the traditional grid pattern. The typical block size is 250’ by 250’. Over the years some of streets within the grid have been abandoned. Additionally the east west streets north of Pierce are blocked by on-ramps and exit-ramps from IH 45. The existing grid network and ongoing pedestrian improvements within the area has improved pedestrian accessibility.

A number of the north south streets in Midtown east of Brazos serve as Bus Routes. However, Bagby and Brazos between IH 45 and Elgin do not serve as bus routes. METRO's light rail transit runs along Main Street. East-west streets Dallas, Gray, Webster, Tuam/Fairview and Westheimer also serve as bus routes. McGowen, Helena and Fariview, as identified in the exhibit below are designated bike routes in the area.



Planning & Development Department, City of Houston


2011 MTFPA Requests
Bagby St.
DALLAS
GRAY
WESTHEIMER
MONTROSE
IH 45
BAGBY
BRAZOS
MAIN
FANNIN
MCGOWEN
CRAWFORD
ELGIN
SPUR 527
Legend
Single-Family Residential
Multi-Family Residential
Commercial
Office
Industrial
Public & Institutional
Transportation & Utility
Park & Open Spaces
Undeveloped
Agriculture Production
Open Water
2%
0%
4%
2%
5%
16%
32%
19%
20%
Land Use Composition
Land Use | Acre | %
Single-Family Residential | 90.0 | 32%
Multi-Family Residential | 54.9 | 20%
Commercial | 51.8 | 19%
Office | 14.1 | 5%
Industrial | 6.0 | 2%
Public & Institutional | 11.9 | 4%
Transportation & Utility | 0.9 | 0%
Park & Open Spaces | 4.4 | 2%
Undeveloped | 45.3 | 16%
Total | 279.3 | 100%
N
W
E
S
0
0.15
0.3
Miles
Planning & Development Department, City of Houston


2011 MTFPA Requests
Bagby St.
Public Transit /Bikeway
LRT Station
Transit Center
Bus Route
Bike Lane (COH)
Shared Lane (COH)
DALLAS
313
048
IH 45
Cleveland St
Heiner St
003
MONTROSE
Taft St
BAGBY
BRAZOS
Webster St
Fairview St
Juam St
WESTHEIMER
042
SPUR 527
ELGIN
Smith St
Louisiana St
Milam St
Travis St
MAIN
Main Street Square
Bell
Downtown Transit Center
St Joseph Pkwy
McGowen
FANNIN
MCGOWEN
CRAWFORD
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0 0.05 0.1 0.2
Miles
Planning & Development Department, City of Houston